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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/381,526	04/12/2000	MARCEL AESCHLIMANN	41-303-3	4076
7609	7590	11/25/2003	EXAMINER	
RANKIN, HILL, PORTER & CLARK, LLP 700 HUNTINGTON BUILDING 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405			PIAZZA CORCORAN, GLADYS JOSEFINA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/381,526	AESCHLIMANN ET AL.
	Examiner Gladys J Piazza Corcoran	Art Unit 1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 22 September 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 23,26-31,33,34,36,37,39,40,44-46,48,49,51 and 55-64 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 23,26-31,33 and 34 is/are allowed.
- 6) Claim(s) 36,37,39,40,44-46,48,49,51 and 55-64 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>19</u> .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____

## FINAL ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 48, 63, 64 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 48 recites "comprising first and second substantially cylindrical portions joined together at a joint region". There is no disclosure of joining two cylindrical portions at a joint region in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 48, 62-64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 48 recites, "and being disposed adjacent to the distal tip." It is unclear if this refers to the first or second cylindrical portion.

6. Claim 62 recites the limitation "said thermoplastic material" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. It is unclear as to whether this refers to the first or second thermoplastic material.

7. Claim 63 recites the limitation "said thermoplastic material" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. It is unclear as to whether this refers to the first or second thermoplastic material.

8. Claim 64 recites the limitation "the outside surface" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to -- the outer surface--.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 48, 58, 63, 64 are rejected under 35 U.S.C. 102(b) as being anticipated by Aeschlimann et al. (WO 96/01377).

Aeschlimann discloses a combination of a joining element (8.1) and at least one part composed of porous material with the one part having an outer surface (wood part see figure 10) and a bore having a closed inner end (7.1) and an open outer end (see figure 10), the joining element including a body having a proximal end (top of 8.1 in figure 10) and a distal tip defining a first preselected anchoring point (bottom of 8.1 in figure 10), the body comprising first and second cylindrical portions joined together at a

joint region with the first cylindrical portion having a smaller diameter than the second cylindrical portion and disposed adjacent the distal tip (each of the steps 9 are cylindrical portions joined together with the smallest diameter at the bottom; note also that page 17 recites, "dowels are, for example integrally formed onto the parts to be connected to the wood parts"), with the joint region defining a second preselected anchoring point spaced from the first anchoring point (the step 9), the body comprising a first thermoplastic material at said first anchoring point and a second thermoplastic material at said second anchoring point (the entire dowel is thermoplastic), the joining element is disposed in the bore of the at least one part (figure 10), the thermoplastic materials at the first and second points having been plasticized by application of energy and pressure to extend into the porous material of the part and securing the element to the at least one part (pages 16-18).

As to claim 58, see discussion above. Additionally, Aeschlimann discloses the joining element having responded to an application of pressure and vibration energy to form an anchor area in the part and the thermoplastic material having been pressed beyond the closed inner end of the bore in the axial direction of the bore to form a composite in the anchor area (page 18, the thermoplastic material of the dowel penetrates into the wood by up to 50 mm).

As to claim 59, the joining element is entirely of thermoplastic material. As to claims 60 and 63, it appears that Aeschlimann discloses the claimed thermoplastics for the thermoplastic dowel (see pages 9, 11). As to 64, once the dowel is pressed into the

part in Aeschlimann the proximate end will be flush with the outer surface of the part (the dowel is substantially about the same size as the bore, page 17).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 36, 37, 40, 44, 45, 46, 48, 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aeschlimann et al. (WO 96/01377 A1), and further in view of O'Conner et al. (US Patent No. 4,761,871) and/or Bappert et al. (US Patent No. 4,675,972).

Aeschlimann discloses a combination of a joining element (8.1) and first and second parts comprised of a porous material and joined together by said joining element part (wood or wood-like part; see figures), with the first and second parts

defining a bore, the bore having a closed inner end (see figures), and a cylindrical inner surface (pages 16-18).

As to the limitation that the bore has an open outer end in the second part, it is considered well known in the art to join parts together by forming a bore entirely through one part and into the other part. Aeschlimann discloses joining two parts with a joining element, however it is not clear whether Aeschlimann discloses that the bore through the second porous part has an outer end. However, it is well known to join two porous parts by forming a bore through a second part and into a first part with a inner closed end and where the outer end of the bore allows for a joining pin, for example with an enlarged head in order to additionally mechanically joining the parts together. For example, O'Conner discloses a method of joining parts where a part has an outer end of the bore in order to provide a joining element, with an enlarged head, in order to additionally mechanically hold the second part to the first part (see figure 9; column 6, lines 44-64). Bappert also discloses an example of joining parts where a joining pin, with an enlarged head, is provided through a bore through a second part with an outer end and into a first part with a closed end in order to firmly press the second part to the first part (see figures; column 1, lines 7-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of joining two parts with a joining element as shown by Aeschlimann where the bore hold is through the second part and the joining pin has an enlarged head as it is well known to join parts together in this fashion as exemplified by O'Conner and or Bappert in order to provide additional mechanical joining of the two parts.

As to the further limitations, Aeschlimann discloses providing steps in the bore and the dowel or joining element (see figure 10). The first cylindrical portion is adjacent to the closed inner end and a second cylindrical portion between the first portion and the open out end, the second portion having a greater diameter than the first portion (see figure 10). The joining element comprising a body member disposed in the bore, with a first and second portion (steps see figure 10) with the first portion of the joining element having a diameter about equal to the first portion in the bore and the second portion of the joining element having a diameter about equal to the second portion in the bore (see figure 10, the steps in the joining element fit into the steps of the bore in a first position as shown in figure 10 and in a second position once it is bonded, therefore having equal diameters to the bore in either position). The steps of the joint forms anchor points and the entire joint is thermoplastic, therefore there is thermoplastic material adjacent each point. The steps are throughout the bore, therefore at least one step would be in each part. Aeschlimann also discloses having applied pressure and vibration energy to form macroscopic cavities and to plasticize the thermoplastic materials to flow into the macroscopic cavities at the steps and forming in the anchor areas composite areas of thermoplastic and porous materials (pages 16-18).

As to claim 37, Aeschlimann discloses a head portion on said body member (the top stepped portion of 8.2, see figure 10) and said head portion being disposed at said open outer end (figure 10). Additionally, as discussed above, O'Conner and or Bappert both show head portions on joining elements in order to provide additional mechanical joining of the parts. As to the further limitations, Aeschlimann discloses the

thermoplastic material at the tip having been responsive to an application of pressure and vibration energy to said head portion so as to have formed a macroscopic anchor area in said part beyond said closed inner end in the axial direction of the bore (the dowel penetrates into the wood by up to 50 mm, page 18), and said thermoplastic material having been plasticized by said application of pressure and vibration energy so as to have been pressed into said macroscopic anchor area, and thereby to have formed a composite material in the macroscopic anchor area (pages 16-18).

As to claims 40, 61, the entire dowel is of thermoplastic material (pages 16-18). As to claims 44 and 45, it is considered well known to provide a pointed tip or a concave tip for dowels for connecting parts and it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the dowel in Aeschlimann with a point or concave, only the expected results would be attained. As to claim 45, the dowel in Aeschlimann has a flat tip (see figures). As to claims 46, 62, it appears that Aeschlimann discloses the claimed thermoplastics for the thermoplastic dowel (see pages 9, 11). Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the thermoplastic dowel in Aeschlimann out of well known materials for thermoplastic dowels, only the expected results would be attained.

As to claims 48, 63, 64, see discussion above.

14. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aeschlimann et al. as applied to claim 58 above, and further in view of Lautenschlager (US Patent No. 5,308,205).

Aeschlimann discloses using the dowel (8) for fixing parts to a porous part; "dowels are, for example, integrally formed onto the parts to be connected to the wood parts. One application of such a method is, for example, the attachment of fittings to wood parts" (page 17). It is well known in the art to use dowels in wooden parts for fixedly attaching second parts to the wooden part. It is also known to provide an internally threaded opening for receiving an attachment. Furthermore, Lautenschlager discloses a dowel (10) for fixedly attaching second parts (either screw 24 or part 12) to a first part (14) (see figures 3, 4, 6). As to claim 39, Lautenschlager discloses the dowel having an internally threaded opening for receiving an attachment (the screw is threadedly attached to the dowel). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of joining parts as shown in Aeschlimann where the joining element fixedly attaches a second part to the first part with an internal thread in order to fixedly attach parts to each other as is well known and exemplified by Lautenschlager.

15. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aeschlimann et al. in view of O'Conner et al. and/or Bappert et al. as applied to claim 37 above, and further in view of Hendrickson (US Patent No. 5,125,442) and/or Kessler (US Patent No. 3,723,215).

Aeschlimann notes that the shape of anchoring is dependent upon the shape of the tip of the dowel, however does not specifically disclose additional shapes (page 18). It is well known in the art to provide a pointed tip for a dowel when connecting parts. For example, Hendrickson discloses a dowel for connecting parts with a pointed tip.

Kessler also discloses a dowel with a pointed tip for connecting parts. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the joining element in Aeschlimann with a pointed tip as is considered well known in the art to provide dowels with such a well known shape and as further exemplified by Hendrickson and/or Kessler, only the expected results would be attained.

16. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aeschlimann et al. in view of O'Conner et al. and/or Bappert et al. as applied to claim 37 above, and further in view of Green (US Patent No. 2,510,693) and/or Clark (US Patent No. 772,029).

Aeschlimann notes that the shape of anchoring is dependent upon the shape of the tip of the dowel, however does not specifically disclose additional shapes (page 18). It is well known in the art to provide a concave tip for fasteners when connecting parts. For example, Green discloses a fastener for connecting parts with a concave tip (see figure 4). Clark also discloses a fastener with a concave tip for connecting parts. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the joining element in Aeschlimann with a concave tip as is considered well known in the art to provide fasteners with such a well known shape and as further exemplified by Green and/or Clark, only the expected results would be attained.

17. Claims 46, 60, 62, 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aeschlimann et al. (optionally in view of O'Conner et al. and/or Bappert et al.) as applied to claims 36, 37, 48, 58 above, and further in view of Hewitt (US Patent No. 3,481,803).

It appears as though Aeschlimann discloses the thermoplastic dowel is composed of the thermoplastic materials as claimed on pages 9 and 11. Furthermore, it would have been well within the purview of one of ordinary skill in the art to provide the thermoplastic dowel from known thermoplastic materials for fasteners in the art. For example, Hewitt discloses forming thermoplastic fasteners from the materials as claimed (column 5, lines 43-66). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the thermoplastic dowel in Aeschlimann with well known thermoplastics in the art as exemplified by Hewitt, only the expected results would be attained.

18. Claims 49, 55-57 are rejected under 35 U.S.C. 103 as being unpatentable over McDonnell (US Patent No. 5,785,476) in view of Green (US Patent No. 2,510,693).

McDonnell discloses a joining element (fastener) for attachment in a bore having a closed inner end in a part comprising a porous material (wood), with a body having a tip defining a pre-selected anchoring point and further having a thermoplastic material at said anchoring point (the tip is of a soft material such as PVC which is thermoplastic), and the body has at the end of the body opposite of the tip means for attaching a further part (the indentations on the head of a screw read on the limitation of means for attaching a further part, for example, a screw driver can be attached at the end, or conventionally used screw covers can be attached at the end), said thermoplastic material at said first anchoring point being plasticizable by an application of vibration energy and pressure (it is thermoplastic, therefore it is capable of being plasticizable by an application of energy and pressure).

While McDonnell discloses that at least part of the remainder of the body being from a different material than said thermoplastic material (the rest of the fastener is of a harder material), McDonnell does not specifically disclose what type of material the rest of the fastener is made of. However, it is well known in the art to form fasteners of plastic material and one of ordinary skill in the art would look to conventionally used materials to form the fastener of McDonnell. For example, Green discloses forming fasteners such as nails, screws, etc. from plastic material. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fastener in McDonnell with a hard end made of conventionally known materials for forming fasteners such as plastic as exemplified by Green, only the expected results would be attained.

As to claim 55, the tip of the element is a point (see figures). As to claim 57, the thermoplastic material is PVC.

As to claim 56, it is well known in the art to provide a flat or concave tip for fasteners. For example, Green discloses a fastener with a flat (see figure 3) or concave tip (see figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fastener in McDonnell with a flat or concave tip as is well known in the art to provide fasteners with such a well known shape and as further exemplified by Green, only the expected results would be attained.

19. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonnell in view of Green as applied to claim 49 above, and further in view of Lautenschlager (US Patent No. 5,308,205).

It is well known in the fastening art to provide an internally threaded opening for receiving additional attachments. For example, Lautenschlager discloses a fastener (10) with an internally threaded opening for receiving a fitting (screw 24) (see figures 3, 4, 6) (the screw is threadedly attached to the fastener). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the fastener as shown in McDonnell where the joining element has an internally threaded opening for receiving a fitting as is considered known in the fastener art and exemplified by Lautenschlager, only the expected results would be attained.

20. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonnell in view of Green as applied to claim 49 above, and further in view of Hewitt (US Patent No. 3,481,803).

McDonnell discloses the tip is formed of a soft material such as PVC. However, it would have been well within the purview of one of ordinary skill in the art to provide the soft material tip of other known thermoplastic materials as shown in the art. For example, Hewitt discloses forming thermoplastic fasteners from the materials as claimed (column 5, lines 43-66). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the thermoplastic tip in McDonnell with well known thermoplastics in the art as exemplified by Hewitt, only the expected results would be attained.

#### ***Response to Arguments***

21. Applicant's arguments filed September 8, 2003 have been fully considered but they are not persuasive.

Applicant argues on pages 13-14, 25-26 that the McDonnell reference does not show that the remainder of the fastener is a plastic material different from the thermoplastic material. As discussed above, while McDonnell does not specifically disclose the material of the remainder of the fastener, it is well known in the art to form fasteners from plastic materials, as exemplified by Green. Furthermore, one of ordinary skill in the art at the time of the invention would look to conventional materials for forming fasteners in the art since McDonnell did not particularly disclose the materials for the remainder of the fastener. Applicant further argues that McDonnell does not show means for attaching a further part. As discussed above, the indentations on the head of a screw read on the limitation of means for attaching a further part, for example, a screw driver can be attached at the end, or conventionally used screw covers can be attached at the end.

Applicant argues on page 18 that the reference Aeschlimann does not disclose a bore with an open end in a second part. As discussed above, it would have been obvious to provide two parts with the bore having an open end in the second part in as it is well known to join parts together in this fashion as exemplified by O'Conner and or Bappert in order to provide additional mechanical joining of the two parts.

Applicant argues on page 18 that Aeschlimann fails to disclose the thermoplastic material of the element 8 as flowing beyond the closed ends of the bores in the axial direction of the bores and that the reference only discloses penetrating the wood in a direction perpendicular to the bore axis. The reference clearly states that the "thermoplastic material of the dowel penetrates into the wood by up to 50 mm". The

reference then further discloses that the thermoplastic material also is anchored in the wood by additionally flowing in the direction parallel to the wood fibers, which makes the dowel truly anchored in the wood. Consequently the reference meets the limitations of the claims.

Applicant argues on page 19 in reference to claim 48 that the Aeschlimann reference does not show two parts joined together with an open end. (See discussion above with additional references O'Conner and or Bappert). It is further noted that claim 48 only requires one part and the embodiment of figures 10 and 11 in Aeschlimann show one part with a dowel and a bore with an open end. Additionally, the joints as shown by Aeschlimann in view of O'Conner and or Bappert also meet the claim limitations.

***Allowable Subject Matter***

22. Claims 23, 26-31, 33, 34 are allowed.
23. The following is a statement of reasons for the indication of allowable subject matter: The claims 23, 26-31, 33, 34, are considered allowable for the newly amended limitations and the reasons as argued by Applicant. Aeschlimann discloses a method for anchoring a joining element in a part where the joining element eventually is inserted into the bore with the distal end against the inner closed end of the bore, however, the joining element in Aeschlimann can not be positioned in the bore with substantially no force and with the distal end of the inserted joining element disposed against the inner closed end of the bore. No additional prior art was found to show or suggest the method of anchoring a joining element in the claimed environment where the joining

element is positioned in the bore with substantially no force and with the distal end of the inserted joining element disposed against the inner closed end of the bore.

***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (703) 305-1271 until December 18, 2003 and (571) 272-1214 afterwards. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone

number for the organization where this application or proceeding is assigned is (703)  
872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Gladys JP Corcoran

  
JEFF H. AFTERGUT  
PRIMARY EXAMINER  
GROUP 1300